DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 24462
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel ovarian related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "ovarian antigens," and the use of such ovarian antigens for detecting disorders of the ovaries and/or breast, particularly the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian associated nucleic acid molecules are provided encoding novel ovarian associated polypeptides. Novel ovarian polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 40 OF 70 USPATFULL
ACCESSION NUMBER: 2002:84902 USPATFULL
TITLE: Nucleic acids, proteins and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002044941	A1	20020418
APPLICATION INFO.:	US 2001-929302	A1	20010810 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US5918, filed on 8 Mar 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-124270P	19990312 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 21121
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel lung cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "lung cancer antigens," and

antibodies that immunospecifically bind these polypeptides, and the use of such lung cancer polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the lung,
including, but not limited to, the presence of lung cancer and lung cancer metastases. More specifically, isolated lung cancer nucleic acid molecules are provided encoding novel lung cancer polypeptides. Novel lung cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and
synthetic methods for producing human lung cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the lung, including lung cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 41 OF 70 USPATFULL

ACCESSION NUMBER:	2002:78729 USPATFULL		
TITLE:	Nucleic acids, proteins, and antibodies		
INVENTOR(S):	Rosen, Craig A., Laytonsville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES Barash, Steven C., Rockville, MD, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002042386	A1	20020411
APPLICATION INFO.:	US 2001-764870	A1	20010117 (9)
	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-179065P	20000131 (60)	
	US 2000-180628P	20000204 (60)	
	US 2000-214886P	20000628 (60)	
	US 2000-217487P	20000711 (60)	
	US 2000-225753P	20000814 (60)	
	US 2000-220963P	20000726 (60)	
	US 2000-217496P	20000711 (60)	
	US 2000-225447P	20000814 (60)	
	US 2000-218290P	20000714 (60)	
	US 2000-225757P	20000814 (60)	
	US 2000-226668P	20000822 (60)	
	US 2000-216647P	20000707 (60)	
	US 2000-225267P	20000814 (60)	
	US 2000-216880P	20000707 (60)	
	US 2000-225270P	20000814 (60)	
	US 2000-251869P	20001208 (60)	
	US 2000-235834P	20000927 (60)	
	US 2000-234274P	20000921 (60)	
	US 2000-234223P	20000921 (60)	
	US 2000-228924P	20000830 (60)	
	US 2000-224518P	20000814 (60)	
	US 2000-236269P	20000929 (60)	
	US 2000-224519P	20000814 (60)	
	US 2000-220964P	20000726 (60)	
	US 2000-241809P	20001020 (60)	
	US 2000-249299P	20001117 (60)	
	US 2000-236327P	20000929 (60)	
	US 2000-241785P	20001020 (60)	
	US 2000-244617P	20001101 (60)	

	US 2000-225269P	20000814 (60)
	US 2000-236369P	20000929 (60)
	US 2000-251956P	20001208 (60)
	US 2000-251968P	20001208 (60)
	US 2000-229344P	20000901 (60)
	US 2000-234497P	20000915 (60)
	US 2000-229343P	20000901 (60)
	US 2000-229345P	20000901 (60)
	US 2000-229287P	20000901 (60)
	US 2000-229513P	20000905 (60)
	US 2000-231413P	20000908 (60)
	US 2000-229509P	20000905 (60)
	US 2000-236367P	20000929 (60)
	US 2000-237239P	20001002 (60)
	US 2000-237238P	20001002 (60)
	US 2000-236370P	20000929 (60)
	US 2000-236802P	20001002 (60)
	US 2000-237037P	20001002 (60)
	US 2000-237040P	20001002 (60)
	US 2000-240460P	20001020 (60)
	US 2000-239935P	20001013 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 23133
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 41 OF 70 USPATFULL
ACCESSION NUMBER: 2002:78442 USPATFULL
TITLE: Nucleic acids, proteins, and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Barash, Steven C., Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020042096	A1	20020411	
APPLICATION INFO.:	US 2001-764887	A1	20010117	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-178065P	20000131 (60)
	US 2000-183628P	20000204 (60)
	US 2000-214686P	20000628 (60)
	US 2000-217487P	20000711 (60)
	US 2000-225758P	20000814 (60)
	US 2000-220963P	20000726 (60)

US 2000-217496P 20000711 (60)
US 2000-225447P 20000814 (60)
US 2000-218290P 20000714 (60)
US 2000-225757P 20000814 (60)
US 2000-226868P 20000822 (60)
US 2000-216647P 20000707 (60)
US 2000-225267P 20000814 (60)
US 2000-216880P 20000707 (60)
US 2000-225270P 20000814 (60)
US 2000-251469P 20001208 (60)
US 2000-235834P 20000927 (60)
US 2000-234274P 20000921 (60)
US 2000-234223P 20000921 (60)
US 2000-228904P 20000830 (60)
US 2000-224518P 20000814 (60)
US 2000-236369P 20000929 (60)
US 2000-224519P 20000814 (60)
US 2000-220964P 20000726 (60)
US 2000-241809P 20001020 (60)
US 2000-240993P 20001117 (60)
US 2000-236827P 20000929 (60)
US 2000-241785P 20001020 (60)
US 2000-244617P 20001101 (60)
US 2000-225268P 20000814 (60)
US 2000-236368P 20000929 (60)
US 2000-251956P 20001208 (60)
US 2000-251968P 20001208 (60)
US 2000-229344P 20000901 (60)
US 2000-234997P 20000925 (60)
US 2000-229343P 20000901 (60)
US 2000-229345P 20000901 (60)
US 2000-229287P 20000901 (60)
US 2000-229513P 20000905 (60)
US 2000-231413P 20000908 (60)
US 2000-229509P 20000905 (60)
US 2000-236367P 20000929 (60)
US 2000-237039P 20001002 (60)
US 2000-237038P 20001002 (60)
US 2000-236370P 20000929 (60)
US 2000-236802P 20001002 (60)
US 2000-237037P 20001002 (60)
US 2000-237040P 20001002 (60)
US 2000-240960P 20001020 (60)
US 2000-239935P 20001013 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 19543
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel liver related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "liver antigens," and the use of such liver antigens for detecting disorders of the liver, particularly the presence of cancer of liver and cancer metastases. More specifically, isolated liver associated nucleic acid molecules are provided encoding novel liver associated polypeptides. Novel liver polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human liver associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing,

treating, preventing and/or prognosing disorders related to the liver, including cancer of liver tissues, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 43 OF 70 USPATFULL
ACCESSION NUMBER: 2002:72627 USPATFULL
TITLE: Nucleic acids, proteins, and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002039764	A1	20020404
APPLICATION INFO.:	US 2001-929293	A1	20010310 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US5881, filed on 6 Mar 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-124270P	19990312 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 20097
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel ovarian cancer and/or breast cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "ovarian and/or breast antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such ovarian and/or breast polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the reproductive system, particularly disorders of the ovaries and/or breast, including, but not limited to, the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian and/or breast nucleic acid molecules are provided encoding novel ovarian and/or breast polypeptides. Novel ovarian and/or breast polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian and/or breast polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 44 OF 70 USPATFULL

ACCESSION NUMBER: 2002:48258 USPATFULL
TITLE: 26 Human secreted proteins
INVENTOR(S): Ruben, Steven M., Olney, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Olsen, Henrik, Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Ni, Jian, Rockville, MD, UNITED STATES
Young, Paul, Gaithersburg, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20020026449	A1	20020307
APPLICATION INFO.:	US 2000-726643	A1	20001201 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US15187, filed on 2 Jun 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-137725P	19990607 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 20267
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 45 OF 70 USPATFULL
ACCESSION NUMBER: 2002:43671 USPATFULL
TITLE: 49 human secreted proteins
INVENTOR(S): Moore, Paul A., Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Endress, Gregory A., Potomac, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Komatsoulis, George, Silver Spring, MD, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20020026040	A1	20020228
APPLICATION INFO.:	US 2001-904615	A1	20010716 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-739254, filed on 19 Dec 2000, PENDING Continuation of Ser. No. US

2000-511554, filed on 23 Feb 2000, ABANDONED
Continuation-in-part of Ser. No. WO 1999-US19330,
filed
on 24 Aug 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97817P	19980825 (60)
	US 1998-98634P	19980831 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
LINE COUNT: 19401
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 46 OF 70 USPATFULL
ACCESSION NUMBER: 2002:43187 USPATFULL
TITLE: Transforming growth factor alpha HIII
INVENTOR(S): Wei, Ying-Fei, Berkeley, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002025553	A1	20020228
APPLICATION INFO.:	US 2000-726848	A1	20001201 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-778545, filed on 3 Jan 1997, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-11136P	19960104 (60)
	US 1999-168387P	19991202 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 11810
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel human protein called Transforming Growth Factor Alpha III, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 47 OF 70 USPATFULL
ACCESSION NUMBER: 2002:22151 USPATFULL
TITLE: 18 Human secreted proteins

INVENTOR(S): Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20020012966	A1	20020131
APPLICATION INFO.:	US 2001-768826	A1	20010125 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US22350, filed
on 15 Aug 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-148759P	19990816 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 19157
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 48 OF 70 USPATFULL
ACCESSION NUMBER: 2002:268890 USPATFULL
TITLE: Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis
INVENTOR(S): Dubensky, Jr., Thomas W., Del Mod, CA, United States
Polo, John M., Encinitas, CA, United States
Belli, Barbara A., San Diego, CA, United States
Schlesinger, Sondra, St. Louis, MO, United States
Dryga, Sergey A., Fort Collins, CO, United States
Frolov, Ilya, St. Louis, MO, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)
Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6465634	B1	20021015
APPLICATION INFO.:	US 1999-419900		19991008 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-944645, filed on 6 Oct 1997, Continuation-in-part of Ser. No. US 1997-833148, filed on 4 Apr 1997, now abandoned Continuation-in-part of Ser. No. US 1996-679640, filed on 12 Jul 1996, now abandoned Continuation-in-part of Ser. No. US 1996-668953, filed on 24 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1996-628594, filed on 5 Apr 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Wortman, Donna C.
LEGAL REPRESENTATIVE: Dollard, Anne S., Blackburn, Robert P., Pasternak, Dahna
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 68 Drawing Figure(s); 63 Drawing Page(s)
LINE COUNT: 8244

AB Isolated nucleic acid molecules are disclosed, comprising an alphavirus nonstructural protein gene which, when operably incorporated into a recombinant alphavirus particle, eukaryotic layered vector initiation system, or RNA vector replicon, has a reduced level of vector-specific RNA synthesis, as compared to wild-type, and the same or greater level of proteins encoded by RNA transcribed from the viral junction region promoter, as compared to a wild-type recombinant alphavirus particle. Also disclosed are RNA vector replicons, alphavirus vector constructs, and eukaryotic layered vector initiation systems which contain the above-identified nucleic acid molecules.

L4 ANSWER 49 OF 70 USPATFULL
ACCESSION NUMBER: 2002:254196 USPATFULL
TITLE: Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis
INVENTOR(S): Dubensky, Jr., Thomas W., Del Mar, CA, United States
Polo, John M., Encinitas, CA, United States
Belli, Barbara A., San Diego, CA, United States
Schlesinger, Sondra, St. Louis, MO, United States
Dryga, Sergey A., Fort Collins, CO, United States
Frolov, Ilva, St. Louis, MO, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)
Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6458560	B1	20021001
APPLICATION INFO.:	US 1999-415868		19991008 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-944645, filed on 6 Oct 1997 Continuation-in-part of Ser. No. US 1997-833148, filed on 4 Apr 1997, now abandoned Continuation-in-part of Ser. No. US 1996-679640, filed on 12 Jul 1996, now abandoned Continuation-in-part of Ser. No. US 1996-668953, filed on 24 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1996-628594, filed on 5 Apr 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wortman, Donna C.
LEGAL REPRESENTATIVE: Dollard, Anne S., Cullman, Louis C., Blackburn, Robert P.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 68 Drawing Figure(s); 63 Drawing Page(s)
LINE COUNT: 8154
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated nucleic acid molecules are disclosed, comprising an alphavirus nonstructural protein gene which, when operably incorporated into a recombinant alphavirus particle, eukaryotic layered vector initiation system, or RNA vector replicon, has a reduced level of vector-specific RNA synthesis, as compared to wild-type, and the same or greater level of proteins encoded by RNA transcribed from the viral junction region promoter, as compared to a wild-type recombinant alphavirus particle. Also disclosed are RNA vector replicons, alphavirus vector constructs,

and eukaryotic layered vector initiation systems which contain the above-identified nucleic acid molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 50 OF 70 USPATFULL
ACCESSION NUMBER: 2002:246537 USPATFULL
TITLE: Endonuclease compositions and methods of use
INVENTOR(S): Aguilera, Renato J., Culver City, CA, United States
Lyon, Christopher J., Los Angeles, CA, United States
PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6455250	B1	20020924
APPLICATION INFO.:	US 1998-210422		19981211 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-69205P	19971211 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Priebe, Scott D.
ASSISTANT EXAMINER: Chen, Shin-Lin
LEGAL REPRESENTATIVE: Mandel & Adriano
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 6414
AB Disclosed are methods for modulating apoptosis and altering programmed cell death events using novel Endo-SR gene compositions and the polypeptides encoded thereby. Also disclosed are methods for repairing DNA, modulating genetic recombination in a cell, and altering DNA rearrangement in a host cell. Also disclosed are methods for the design and isolation of peptidomimetics and other inhibitors of Endo-SR useful in the treatment of leukemias, lymphomas, and other cancers.

L4 ANSWER 51 OF 70 USPATFULL
ACCESSION NUMBER: 2002:246369 USPATFULL
TITLE: Tumor necrosis factor receptor 5
INVENTOR(S): Wei, Ying-Fei, Berkeley, CA, United States
Ni, Jian, Rockville, MD, United States
Gentz, Reiner L., Rockville, MD, United States
Ruben, Steven M., Odenton, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6455040	B1	20020924
APPLICATION INFO.:	US 2000-573986		20000518 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-6353, filed on 13 Jan 1998, now patented, Pat. No. US 6261801		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-135164P	19990520 (60)
	US 1997-54885P	19970807 (60)
	US 1997-35496P	19970114 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Spector, Lorraine
ASSISTANT EXAMINER: O'Hara, Eileen B.

LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox, PLLC
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Figure(s); 23 Drawing Page(s)
LINE COUNT: 9119

AB The present invention relates to a novel human gene encoding a polypeptide which is a member of the TNF receptor family, and has now been found to bind TRAIL. More specifically, an isolated nucleic acid molecule is provided encoding a human polypeptide named tumor necrosis factor receptor-5, sometimes referred to as "TNFR-5" or "TR5," and now referred to hereinafter as "TRAIL receptor without intracellular domain" or "TRID." TRID polypeptides are also provided, as are vectors, host cells, and recombinant methods for producing the same as well as anti-TRID antibodies. The invention further relates to screening methods for identifying agonists or antagonists of TRAIL polypeptide activity. Also provided are diagnostic and therapeutic methods utilizing such compositions.

L4 ANSWER 52 OF 70 USPATFULL
ACCESSION NUMBER: 2002:238871 USPATFULL
TITLE: Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis
INVENTOR(S): Dubensky, Jr., Thomas W., Del Mar, CA, United States
Polo, John M., Encinitas, CA, United States
Belli, Barbara A., San Diego, CA, United States
Schlesinger, Sondra, St. Louis, MO, United States
Dryga, Sergey A., Fort Collins, CO, United States
Frolov, Ilya, St. Louis, MO, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)
Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6451592	B1	20020917
APPLICATION INFO.:	US 1997-944465		19971006 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-833148, filed on 4 Apr 1997, now abandoned Continuation-in-part of Ser. No. US 1996-679640, filed on 12 Jul 1996, now abandoned Continuation-in-part of Ser. No. US 1996-668953, filed on 24 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1996-628594, filed on 5 Apr 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wortman, Donna C.
LEGAL REPRESENTATIVE: Dollard, Anne S., Cullman, Louis C., Blackburn, Robert P.
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 63 Drawing Figure(s); 63 Drawing Page(s)
LINE COUNT: 8461
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated nucleic acid molecules are disclosed, comprising an alphavirus nonstructural protein gene which, when operably incorporated into a recombinant alphavirus particle, eukaryotic layered vector initiation system, or RNA vector replicon, has a reduced level of vector-specific RNA synthesis, as compared to wild-type, and the same or greater level of proteins encoded by RNA transcribed from the viral junction region promoter, as compared to a wild-type recombinant alphavirus particle. Also disclosed are RNA vector replicons, alphavirus vector constructs,

and eukaryotic layered vector initiation systems which contain the above-identified nucleic acid molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 53 OF 70 USPATFULL
ACCESSION NUMBER: 2002:201241 USPATFULL
TITLE: Death domain containing receptor-4
INVENTOR(S): Ni, Jian, Rockville, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
Pan, James G., Belmont, CA, United States
Gentz, Reiner L., Rockville, MD, United States
Dixit, Vishva M., Los Altos Hills, CA, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6433147	B1	20020813
APPLICATION INFO.:	US 2000-565918		20000505 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-13895, filed on 27 Jan 1998, now patented, Pat. No. US 6342363		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-132922P	19990506 (60)
	US 1997-35722P	19970128 (60)
	US 1997-37329P	19970205 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Spector, Lorraine
ASSISTANT EXAMINER: Kaufman, Claire M.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 8675
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel Death Domain Containing Receptor-4 (DR4) proteins which are members of the tumor necrosis factor (TNF) receptor family. In particular, isolated nucleic acid molecules are provided encoding the human DR4 proteins. DR4 polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of DR4 activity and methods for using DR4 polynucleotides and polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 54 OF 70 USPATFULL
ACCESSION NUMBER: 2002:202239 USPATFULL
TITLE: Keratinocyte derived interferon
INVENTOR(S): LaFleur, David W., Washington, DC, United States
Moore, Paul A., Germantown, MD, United States
Ruben, Steven M., Olney, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6433145	B1	20020813
APPLICATION INFO.:	US 2000-487792		20000120 (9)

PELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-358587, filed on 21 Jul 1999, now abandoned Continuation-in-part of Ser. No. WO 1999-US16424, filed on 21 Jul 1999

	NUMBER	DATE
PRIORITY INFORMATION:	US 60143P	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Stucker, Jeffrey
ASSISTANT EXAMINER: Seharaseyon, Jegatheesan
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 92
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 13814
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel KDI protein which is a member of the interferon family. In particular, isolated nucleic acid molecules are provided encoding a human interferon polypeptide, called "KDI". KDI polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of KDI activity. Also provided are therapeutic methods for treating immune system-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 55 OF 70 USPATFULL
ACCESSION NUMBER: 2002:188239 USPATFULL
TITLE: Alphavirus structural protein expression cassettes
INVENTOR(S): Dubensky, Jr., Thomas W., Piedmont, CA, United States
Polo, John M., Encinitas, CA, United States
Schlesinger, Sondra, St. Louis, MO, United States
Frolov, Ilya, St. Louis, MO, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S. corporation)
Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6426196	B1	20020730
APPLICATION INFO.:	US 1999-415785		19991008 (9)

PELATED APPLN. INFO.: Division of Ser. No. US 1997-944465, filed on 6 Oct 1997 Continuation-in-part of Ser. No. US 1997-833148, filed on 4 Apr 1997, now abandoned Continuation-in-part of Ser. No. US 1996-679640, filed on 12 Jul 1996, now abandoned Continuation-in-part of Ser. No. US 1996-668953, filed on 24 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1996-628594, filed on 5 Apr 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wortman, Donna C.
LEGAL REPRESENTATIVE: Blackburn, Robert P., Pasternak, Dahna, Dollard, Anne S.
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 68 Drawing Figure(s); 63 Drawing Page(s)
LINE COUNT: 8254
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated nucleic acid molecules are disclosed. comprising an alphavirus nonstructural protein gene which, when operably incorporated into a recombinant alphavirus particle, eukaryotic layered vector initiation system, or RNA vector replicon, has a reduced level of vector-specific RNA synthesis, as compared to wild-type, and the same or greater level of proteins encoded by RNA transcribed from the viral junction region promoter, as compared to a wild-type recombinant alphavirus particle. Also disclosed are RNA vector replicons, alphavirus vector constructs, and eukaryotic layered vector initiation systems which contain the above-identified nucleic acid molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 56 OF 70 USPATFULL
ACCESSION NUMBER: 2002:122036 USPATFULL
TITLE: Sustained delivery of polyionic bioactive agents
INVENTOR(S): Levy, Robert J., Merion Station, PA, United States
PATENT ASSIGNEE(S): The Children's Hospital of Philadelphia, Philadelphia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6395029	B1	20020528	
APPLICATION INFO.:	US 1999-234011		19990119	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: McDermott, Corrine
ASSISTANT EXAMINER: Koh, Choon P.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 2616
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to compositions and methods for delivering a polyionic bioactive composition such as a nucleic acid to a tissue of an
animal. The compositions of the invention include compositions which comprise a matrix comprising the polyionic bioactive agent and wherein at least most of the polyionic bioactive agent at the exterior portion of the matrix is present in a condensed form. The invention also includes methods of making such compositions, including particles, devices, bulk materials, and other objects which comprise, consist of, or are coated with such compositions. Methods of delivering a polyionic bioactive agent to an animal tissue are also described. The invention further includes a method of storing a nucleic acid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 57 OF 70 USPATFULL
ACCESSION NUMBER: 2002:116068 USPATFULL
TITLE: Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis
INVENTOR(S): Dubensky, Jr., Thomas W., Del Mon, CA, United States
Polo, John M., Encinitas, CA, United States
Belli, Barbara A., San Diego, CA, United States
Schlesinger, Sondra, St. Louis, MO, United States
Dryga, Sergey A., Fort Collins, CO, United States
Frolov, Ilya, St. Louis, MO, United States
PATENT ASSIGNEE(S): Chiron Corporation, Emeryville, CA, United States (U.S.
corporation)
Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6391632	B1	20020521
APPLICATION INFO.:	US 1999-415784		19991008 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-944465, filed on 6 Oct 1997 Continuation-in-part of Ser. No. US 1997-833148, filed on 4 Apr 1997, now abandoned Continuation-in-part of Ser. No. US 1996-679640, filed on 12 Jul 1996, now abandoned Continuation-in-part of Ser. No. US 1996-668953, filed on 24 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1996-628594, filed on 5 Apr 1996, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wortman, Donna C.
LEGAL REPRESENTATIVE: Dellard, Anne S., Cullman, Louis C., Blackburn, Robert P.
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 68 Drawing Figure(s); 63 Drawing Page(s)
LINE COUNT: 8166
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated nucleic acid molecules are disclosed, comprising an alphavirus nonstructural protein gene which, when operably incorporated into a recombinant alphavirus particle, eukaryotic layered vector initiation system, or RNA vector replicon, has a reduced level of vector-specific RNA synthesis, as compared to wild-type, and the same or greater level of proteins encoded by RNA transcribed from the viral junction region promoter, as is compared to a wild-type recombinant alphavirus particle.

Also disclosed are RNA vector replicons, alphavirus vector constructs, and eukaryotic layered vector initiation systems which contain the above-identified nucleic acid molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 58 OF 70 USPATFULL

ACCESSION NUMBER: 2002:116027 USPATFULL
TITLE: Human chemokine beta-10 mutant polypeptides
INVENTOR(S): Olsen, Henrik S., Gaithersburg, MD, United States
Li, Haodong, Gaithersburg, MD, United States
Adams, Mark D., North Potomac, MD, United States
Gentz, Solange H. L., Rockville, MD, United States
Alderson, Ralph, Gaithersburg, MD, United States
Li, Yuling, Germantown, MD, United States
Parmelee, David, Rockville, MD, United States
White, John R., Coatsville, PA, United States
Appelbaum, Edward R., Blue Bell, PA, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
SmithKline Beecham, Corp., King of Prussia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6391589	B1	20020521
APPLICATION INFO.:	US 2000-479729		20000107 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-462967, filed on 5 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1995-458355, filed on 2 Jun 1995, now patented, Pat. No. US 5981230 Continuation-in-part of Ser. No. WO 1994-US9484, filed on 23 Aug 1994

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-115439P	19990108 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Mertz, Prema
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 21 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 11964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Human chemokine Beta-10 polypeptides and DNA (RNA) encoding such chemokine polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such chemokine polypeptides for the treatment of leukemia, tumors, chronic infections, autoimmune disease, fibrotic disorders, wound healing and psoriasis. Antagonists against such chemokine polypeptides and their use as a therapeutic to treat rheumatoid arthritis, autoimmune and chronic inflammatory and infective diseases, allergic reactions, prostaglandin-independent fever and bone marrow failure are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 59 OF 70 USPATFULL
ACCESSION NUMBER: 2002:81254 USPATFULL
TITLE: Tissue plasminogen activator-like protease
INVENTOR(S): Moore, Paul A., Germantown, MD, United States
Ruben, Steven M., Olney, MD, United States
Ebner, Reinhard, Gaithersburg, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6372473	B1	20020416
APPLICATION INFO.:	US 1999-411977		19991004 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-84491, filed on 27 May 1998

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-48000P	19970528 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Slobodyansky, Elizabeth
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 11319
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel t-PALP protein which is a member of the serine protease family. In particular, isolated nucleic acid molecules are provided encoding the human t-PALP protein. t-PALP polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of
t-PALP activity. Also provided are diagnostic methods for detecting circulatory system-related disorders and therapeutic methods for treating circulatory system-related disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 60 OF 70 USPATFULL
ACCESSION NUMBER: 2002:81054 USPATFULL
TITLE: Senescent cell-derived inhibitors of DNA synthesis

INVENTOR(S): Smith, James R., Houston, TX, United States
Drutz, David J., Houston, TX, United States
Wilson, Deborah R., Houston, TX, United States
Zumstein, Louis A., Houston, TX, United States
PATENT ASSIGNEE(S): Baylor College of Medicine, Houston, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6372249	B1	20020416
APPLICATION INFO.:	US 1994-327874		19941024 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1994-US9700, filed on 26 Aug 1994 Continuation-in-part of Ser. No. US 1994-274535, filed on 13 Jul 1994, now abandoned Continuation-in-part of Ser. No. US 1994-229420, filed on 15 Apr 1994, now abandoned Continuation-in-part of Ser. No. US 1994-203535, filed on 25 Feb 1994, now abandoned Continuation-in-part of Ser. No. US 1993-153564, filed on 17 Nov 1993, now abandoned Continuation-in-part of Ser. No. US 1993-113372, filed on 30 Aug 1993, now abandoned Continuation-in-part of Ser. No. US 1992-970462, filed on 2 Nov 1992, now patented, Pat. No. US 5302706, issued on 12 Apr 1994 Continuation-in-part of Ser. No. US 327874 Division of Ser. No. US 1994-268439, filed on 30 Jun 1994, now abandoned Division of Ser. No. US 1994-160814, filed on
3 Jan 1994, now patented, Pat. No. US 5424400 Continuation-in-part of Ser. No. US 1991-808523, filed on 16 Dec 1991, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Kunz, Gary L.
ASSISTANT EXAMINER: Gucker, Stephen
LEGAL REPRESENTATIVE: Norton, Esq., Gerard F., Clifford Chance Rogers & Wells
LLP
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 5347
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The use of liposomal formulations, particularly formulations of positively charged and neutral lipids facilitates cellular uptake of SDI
molecules. The transcription and/or expression of SDI-1-encoding nucleic
acid molecules is facilitated by constructs that contain intervening untranslated regions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 61 OF 70 MEDLINE
ACCESSION NUMBER: 2002495489 IN-PROCESS
DOCUMENT NUMBER: 22244226 PubMed ID: 12356843
TITLE: **Ribozyme** to **proliferating cell nuclear antigen** to treat proliferative vitreoretinopathy.
AUTHOR: Mandava Naresh; Blackburn Peter; Paul David B; Wilson Matthew W; Read Susana B; Alspaugh Eric; Tritz Richard; Barber Jack R; Robbins Joan M; Kruse Carol A
CORPORATE SOURCE: Departments of Ophthalmology, Immunology, and. Pathology, University of Colorado Health Science Center, Denver, Colorado. Department of Ophthalmology, University of Tennessee Health Science Center, Memphis, Tennessee. Immusol, Inc., San Diego, California.

SOURCE: INVESTIGATIVE OPHTHALMOLOGY AND VISUAL SCIENCE, (2002 Oct) 43 (10) 3338-49.
Journal code: 7703701. ISSN: 0146-0404.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20021002
Last Updated on STN: 20021002

AB PURPOSE. A DNA-RNA chimeric **ribozyme** was developed that targets the mRNA of a cell cycle regulatory protein, **proliferating cell nuclear antigen** (**PCNA**). The hypothesis was that inhibition of **PCNA**, essential in DNA replication, would decrease the proliferation of cells that are involved in formation of granuloma after surgical procedures in the **eye**. The ability of intravitreous injection of this **ribozyme** to prevent or inhibit development of proliferative vitreoretinopathy (PVR) was tested in a dispase-induced rabbit PVR model. METHODS. Rabbit genomic DNA encoding **PCNA** was cloned and sequenced. The cleavage of rabbit **PCNA** by the chimeric **ribozyme** was tested in vitro. Delivery of the **ribozyme** to rabbit retinal pigment epithelial (RPE) or fibroblast cells and its effects on proliferation of fibroblasts were examined. The stability of the **ribozyme** in vitreous fluid and serum was studied as well. In the dispase-induced rabbit model of PVR, the ability of the **PCNA ribozyme** to prevent or inhibit development of PVR and retinal detachment (RD) was tested. Experimental groups receiving intravitreous **PCNA ribozyme**, with or without a lipid vehicle, were compared with sham-treated control groups. Progression of PVR in rabbit eyes was followed by indirect ophthalmic examination and observations documented by fundoscopic photography, gross pathology, and histopathology. RESULTS. The chimeric **ribozyme** targeted a specific sequence in the rabbit **PCNA** that was identical with that in the human. In vitro cleavage assays confirmed the ability of the **ribozyme** to cleave the mRNA of **PCNA**. The catalytic efficiency in vitro, calculated as k(2)/K(m)(app), was 0.26 micro M(-1) min(-1). In vitro studies with fluoresceinated **ribozyme** indicated that lipid vehicles facilitated delivery of the **ribozyme** into cells causative of PVR (RPE and fibroblasts); however, the **PCNA ribozyme** decreased the proliferation of fibroblasts, with or without lipid vehicle. The **ribozyme** displayed good stability in vitreous fluid, whereas, it degraded quite rapidly in serum. In animal experiments, rabbits in sham-treated groups usually exhibited development of severe PVR characterized by focal traction or RD. Animals in the **PCNA ribozyme**-treated groups usually did not exhibit an RD. If they did have RD, it was small and localized, or focal tractions developed that did not progress to the degree that the sham-treated animal eyes did over the follow-up period. The in vivo use of a lipid delivery vehicle resulted in a precipitate; however, an effective naked **ribozyme** dose was identified that did not cause this side effect. CONCLUSIONS. In addition to validating the newly developed dispase PVR rabbit model, the results indicate that **ribozyme** targeted against the cell cycle agent **PCNA** is efficacious in the treatment or prevention of PVR in the rabbit **eye**. These experiments suggest that chimeric **ribozyme** targeted against **PCNA** may have a therapeutic or preventative role in humans.

L4 ANSWER 62 OF 70 USPATFULL
ACCESSION NUMBER: 2001:155766 USPATFULL
TITLE: 49 human secreted proteins
INVENTOR(S): Moore, Paul A., Germantown, MD, United States

Ruben, Steven M., Olney, MD, United States
Olsen, Henrik S., Gaithersburg, MD, United States
Shi, Yanggu, Gaithersburg, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
Florence, Kimberly A., Rockville, MD, United States
Soppet, Daniel R., Centreville, VA, United States
Lafleur, David W., Washington, DC, United States
Endress, Gregory A., Potomac, MD, United States
Ebner, Reinhard, Gaithersburg, MD, United States
Komatsoulis, George, Silver Spring, MD, United States
Duan, Roxanne D., Bethesda, MD, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001021700	A1	20010913
APPLICATION INFO.:	US 2000-739254	A1	20001219 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97917P	19980825 (60)
	US 1998-98634P	19980831 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 15462
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 63 OF 70 USPATFULL
ACCESSION NUMBER: 2001:139290 USPATFULL
TITLE: Fibroblast growth factor receptor-5
INVENTOR(S): Young, Paul E., Gaithersburg, MD, United States
Ruben, Steven M., Olney, MD, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001016335	A1	20010823
APPLICATION INFO.:	US 2001-758986	A1	20010112 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-293182, filed on 16 Apr 1999, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-105465P	19981023 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)

LINE COUNT: 6097
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to fibroblast growth factor receptor-5, a novel member of the fibroblast growth factor receptor family. The invention provides isolated nucleic acid molecules encoding human FGFR5 receptors. FGFR5 polypeptides are also provided, as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of FGFR5 receptor activity. Also provided are diagnostic methods for detecting disease states related to the aberrant expression of FGFR5 receptors. Further provided are therapeutic methods for treating disease states including, but not limited to, defects in wound healing, mucositis, defects in angiogenesis, ischemia, host defense dysfunction, endocrine dysfunction, disorders in immune function, and/or disorders in insulin secretion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 64 OF 70 USPATFULL
ACCESSION NUMBER: 2001:235126 USPATFULL
TITLE: Hydrogel compositions for controlled delivery of virus vectors and methods of use thereof
INVENTOR(S): Levy, Robert J., Merion Station, PA, United States
Crombleholme, Timothy, Haverford, PA, United States
Vyavahare, Narendra, Erial, NJ, United States
PATENT ASSIGNEE(S): The Children's Hospital of Philadelphia, Philadelphia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6333194	B1	20011225	
APPLICATION INFO.:	US 2000-487854		20000119	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-116538P	19990119 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wang, Andrew
ASSISTANT EXAMINER: Zara, Jane
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 3154
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to compositions and methods for delivering a virus vector to an animal. The compositions include compositions which comprise a hydrogel matrix (e.g. a collagen matrix which can comprise a poloxamer or an alginate) containing a virus vector therein in a transfectious form. The invention also includes methods of making such hydrogel precursor mixtures and hydrogel matrices, including particles, devices, bulk materials, and other objects which comprise, consist of, or are coated with such mixtures or matrices. The invention further relates to compositions comprising a hydrogel precursor mixture having a virus vector suspended therein, which, when administered to an animal, gel to form a hydrogel matrix containing a virus vector therein in a transfectious form. Methods of delivering a virus vector to an animal tissue are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 65 OF 70 USPATFULL

ACCESSION NUMBER: 2001:93490 USPATFULL
TITLE: Antisense oligonucleotide compositions targeted to angiotensin converting enzyme MRNA and methods of use
INVENTOR(S): Moore, Mark D., Houston, TX, United States
Phillips, M. Ian, Gainesville, FL, United States
Mohuczy, Dagmara, Gainesville, FL, United States
PATENT ASSIGNEE(S): University of Florida, Gainesville, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6248724	B1	20010619
APPLICATION INFO.:	US 1998-162484		19980925 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-63661P	19970925 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Schwartzman, Robert A.
ASSISTANT EXAMINER: Epps, Janet
LEGAL REPRESENTATIVE: Williams, Morgan & Amerson, P.C.
NUMBER OF CLAIMS: 99
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 4383
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antisense oligonucleotides specific for mammalian ACE mRNA have been identified. Administration of these oligonucleotides to animals resulted in a decrease in blood pressure, but no significant change in heart rate. Methods for discovering other oligonucleotides with the same activity are taught, as are uses of the antisense molecules for treatment of human and animal diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 66 OF 70 USPATFULL
ACCESSION NUMBER: 2000:146130 USPATFULL
TITLE: Human thyroid protein zsig45
INVENTOR(S): Deisher, Theresa A., Seattle, WA, United States
Sheppard, Paul O., Redmond, WA, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6140084		20001031
APPLICATION INFO.:	US 1998-203623		19981201 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-67263P	19971203 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Carlson, Karen Cochrane
ASSISTANT EXAMINER: Schnizer, Holly
LEGAL REPRESENTATIVE: Johnson, Jennifer K.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 3515
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to polynucleotide and polypeptide molecules for zsig45, a novel human protein expressed in thyroid. The polypeptides, and polynucleotides encoding them, may be used for detecting human disease states and chromosomal abnormalities, and as a

therapeutic. The present invention also includes antibodies to the zsig45 polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 67 OF 70 USPATFULL

ACCESSION NUMBER:	2000:146085 USPATFULL
TITLE:	Three-dimensional filamentous tissue having tendon or ligament function
INVENTOR(S):	Naughton, Gail K., Del Mar, CA, United States Naughton, Brian A., El Cajon, CA, United States
PATENT ASSIGNEE(S):	Advanced Tissue Sciences, Inc., La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6140039		20001031
APPLICATION INFO.:	US 1999-237980		19990125 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-487749, filed on 7 Jun 1995, now patented, Pat. No. US 5863531 which is a continuation-in-part of Ser. No. US 1994-254096, filed on 6 Jun 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-131361, filed on 4 Oct 1993, now patented, Pat. No. US 5443950 which is a division of Ser. No. US 1990-575518, filed on 30 Aug 1990, now patented, Pat. No. US 5266480 which is a division of Ser. No. US 1989-402104, filed on 1 Sep 1989, now patented, Pat. No. US 5032508 which is a continuation-in-part of Ser. No. US 1988-242096, filed on 8 Sep 1988, now patented, Pat. No. US 4963489 which is a continuation-in-part of Ser. No. US 1987-38110, filed on 14 Apr 1987, now abandoned which is a continuation-in-part of Ser. No. US 1987-36154, filed on 3 Apr 1987, now patented, Pat. No. US 4721096 which is a continuation of Ser. No. US 1986-853569, filed on 18 Apr 1986, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Naff, David M.
LEGAL REPRESENTATIVE:	Pennie & Edmonds LLP
NUMBER OF CLAIMS:	6
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	1783

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A stromal cell-based three-dimensional cell culture system is provided which can be used to culture a variety of different cells and tissues in vitro for prolonged periods of time. The stromal cells along with connective tissue proteins naturally secreted by the stromal cells attach to and substantially envelope a framework composed of a biocompatible non-living material formed into a three-dimensional structure having interstitial spaces bridged by the stromal cells. Living stromal tissue so formed provides support, growth factors, and regulatory factors necessary to sustain long-term active proliferation of cells in culture and/or cultures implanted in vivo. When grown in this three-dimensional system, the proliferating cells mature and segregate properly to form components of adult tissues analogous to counterparts in vivo, which can be utilized in the body as a corrective tissue. The three-dimensional cultures can be used to form tubular tissue structures, like those of the gastrointestinal and genitourinary tracts, as well as blood vessels; tissues for hernia repair and/or tendons and ligaments. A three-dimensional filamentous tissue having tendon or ligament function is prepared containing fibroblasts and collagen naturally secreted by the fibroblasts attached to and

substantially enveloping a three-dimensional filamentous framework.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 68 OF 70 USPATFULL

ACCESSION NUMBER:	2000:15519 USPATFULL
TITLE:	Three-dimensional culture of pancreatic parenchymal cells cultured living stromal tissue prepared in vitro
INVENTOR(S):	Naughton, Gail K., Del Mar, CA, United States Naughton, Brian A., El Cajon, CA, United States
PATENT ASSIGNEE(S):	Advanced Tissue Sciences, Inc., La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6022743		20000208
APPLICATION INFO.:	US 1999-264513		19990308 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-237980, filed on 25 Jan 1999 which is a continuation of Ser. No. US 1995-487749, filed on 7 Jun 1995, now patented, Pat. No. US 5863531 which is a continuation-in-part of Ser. No. US 1994-254096, filed on 6 Jun 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-131361, filed on 4 Oct 1993, now patented, Pat. No. US 5443950 which is a division of Ser. No. US 1990-575518, filed on 30 Aug 1990, now patented, Pat. No. US 5266480 which is a division of Ser. No. US 1989-402194, filed on 1 Sep 1989, now patented, Pat. No. US 5032508 which is a continuation-in-part of Ser. No. US 1988-242096, filed on 8 Sep 1988, now patented, Pat. No. US 4963489 Ser. No. Ser. No. US 1987-38110, filed on 14 Apr 1987, now abandoned And Ser. No. US 1987-36154, filed on 3 Apr 1987, now patented, Pat. No.
US 4721096 which is a continuation of Ser. No. US 1986-853569, filed on 18 Apr 1986, now abandoned

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Naff, David M.
LEGAL REPRESENTATIVE:	Fennie & Edmonds LLP
NUMBER OF CLAIMS:	38
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	1732

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A stromal cell-based three-dimensional cell culture system is prepared which can be used to culture a variety of different cells and tissues in vitro for prolonged periods of time. The stromal cells and connective tissue proteins naturally secreted by the stromal cells attach to and substantially envelope a framework composed of a biocompatible non-living material formed into a three-dimensional structure having interstitial spaces bridged by the stromal cells. The living stromal tissue so formed provides the support, growth factors, and regulatory factors necessary to sustain long-term active proliferation of cells in culture and/or cultures implanted in vivo. When grown in this three-dimensional system, the proliferating cells mature and segregate properly to form components of adult tissues analogous to counterparts in vivo, which can be utilized in the body as a corrective tissue. For example, and not by way of limitation, the three-dimensional cultures can be used to form tubular tissue structures, like those of the gastrointestinal and genitourinary tracts, as well as blood vessels; tissues for hernia repair and/or tendons and ligaments; etc.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 69 OF 70 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:250911 BIOSIS
DOCUMENT NUMBER: PREV200000250911
TITLE: Chimeric **ribozyme** to **proliferating cell nuclear antigen** (**PCNA**) prevents retinal detachment (RD) in a model of proliferative vitreoretinopathy (PVR.
AUTHOR(S.: Mandava, N. (1); Blackburn, P. (1); Wilson, M. W.; Paul, D.
B.; Alspaugh, E. B.; Whiting, C.; Barber, J. R.; Robbins, J. M.; Broswick, B. M. (1); Kruse, C. A.
CORPORATE SOURCE: (1) Ophthalmology, University of Colorado Health Sci Ctr, Denver, CO USA
SOURCE: IOVS, (March 15, 2000) Vol. 41, No. 4, pp. S542.
Meeting Info.: Annual Meeting of the Association in Vision and Opthalmology. Fort Lauderlade, Florida, USA April 30-May 05, 2000 Association for Research in Vision and Ophthalmology
.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L4 ANSWER 70 OF 70 USPATFULL
ACCESSION NUMBER: 1999:12551 USPATFULL
TITLE: In vitro preparation of tubular tissue structures by stromal cell culture on a three-dimensional framework
INVENTOR(S): Naughton, Gail K., Del Mar, CA, United States
Naughton, Brian A., El Cajon, CA, United States
PATENT ASSIGNEE(S): Advanced Tissue Sciences, Inc., La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5863531		19990126
APPLICATION INFO.:	US 1995-487749		19950607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-254096, filed on 6 Jun 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-131361, filed on 4 Oct 1993, now patented, Pat. No. US 5443950 which is a division of Ser. No. US 1990-575518, filed on 30 Aug 1990, now patented, Pat. No. US 5266480 which is a division of Ser. No. US 1989-402104, filed on 1 Sep 1989, now patented, Pat. No. US 5032508 which is a continuation-in-part of Ser. No. US 1988-242096, filed on 8 Sep 1988, now patented, Pat. No. US 4963489 which is a continuation-in-part of Ser. No. US 1987-38110, filed on 14 Apr 1987, now abandoned which is a continuation-in-part of Ser. No. US 1987-36154, filed on 8 Apr 1987, now patented, Pat. No. US 4721096 which is a continuation of Ser. No. US 1986-853569, filed on 18 Apr 1986, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Naff, David M.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1879
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A stromal cell-based three-dimensional cell culture system is provided which can be used to culture a variety of different cells and tissues in
vitro for prolonged periods of time. The stromal cells along with connective tissue proteins naturally secreted by the stromal cells

attach to and substantially envelope a framework composed of a biocompatible non-living material formed into a three-dimensional structure having interstitial spaces bridged by the stromal cells. Living stromal tissue so formed provides support, growth factors, and regulatory factors necessary to sustain long-term active proliferation of cells in culture and/or cultures implanted in vivo. When grown in this three-dimensional system, the proliferating cells mature and segregate properly to form components of adult tissues analogous to counterparts in vivo, which can be utilized in the body as a corrective tissue. The three-dimensional cultures can be used to form tubular tissue structures, like those of the gastrointestinal and genitourinary tracts, as well as blood vessels; tissues for hernia repair and/or tendons and ligaments.

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